

EIF3G Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP5342c

Specification

EIF3G Antibody (Center) Blocking peptide - Product Information

Primary Accession 075821 Other Accession NP 003746.2

EIF3G Antibody (Center) Blocking peptide - Additional Information

Gene ID 8666

Other Names

Eukaryotic translation initiation factor 3 subunit G {ECO:0000255|HAMAP-Rule:MF_03006}, eIF3g {ECO:0000255|HAMAP-Rule:MF_03006}, Eukaryotic translation initiation factor 3 RNA-binding subunit {ECO:0000255|HAMAP-Rule:MF_03006}, eIF-3 RNA-binding subunit {ECO:0000255|HAMAP-Rule:MF_03006}, Eukaryotic translation initiation factor 3 subunit 4 {ECO:0000255|HAMAP-Rule:MF_03006}, eIF-3-delta {ECO:0000255|HAMAP-Rule:MF_03006}, eIF3 p44 {ECO:0000255|HAMAP-Rule:MF_03006}, EIF3G {ECO:0000255|HAMAP-Rule:MF_03006}

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EIF3G Antibody (Center) Blocking peptide - Protein Information

Name EIF3G {ECO:0000255|HAMAP-Rule:MF 03006}

Function

RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:17581632, PubMed:25849773, PubMed:27462815). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S pre-initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation (PubMed:<a href="http://www.uniprot.org/citations/17581632"



target="_blank">17581632). The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem- loop binding to exert either translational activation or repression (PubMed:25849773). This subunit can bind 18S rRNA.

Cellular Location

Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03006}. Nucleus {ECO:0000255|HAMAP-Rule:MF_03006, ECO:0000269|PubMed:17094969} Cytoplasm, perinuclear region {ECO:0000255|HAMAP-Rule:MF_03006, ECO:0000269|PubMed:17094969}. Note=Colocalizes with AIFM1 in the nucleus and perinuclear region

EIF3G Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

EIF3G Antibody (Center) Blocking peptide - Images

EIF3G Antibody (Center) Blocking peptide - Background

Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S preinitiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of posttermination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation. This subunit can bind 18S rRNA.

EIF3G Antibody (Center) Blocking peptide - References

Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 105(47):18139-18144(2008)Masutani, M., et al. EMBO J. 26(14):3373-3383(2007)Damoc, E., et al. Mol. Cell Proteomics 6(7):1135-1146(2007)